

ABSTRACT OF THE DISCLOSURE

A hydrazide substrate is targeted by disease activated protease to shutdown protein products required by viral infections, cancer, and other diseases. Protease cleavage innately targets peptide bonds that are simulated in the hydrazide substrate molecule. Cleavage action releases the reactive hydrazine moiety that bonds to the protease enzyme structure causing its dysfunctional shutdown. That shutdown stops incessant disease activity that holds cell maintenance systems at bay, and also halts the production of proteins and peptides necessary for disease activity and proliferation as viral coat proteins and metastatic cancer proteins exemplify. Other uses for the hydrazide substrates mechanism also exists to shutdown protease systems innate to microorganisms as a way to halt production of peptide signals that induced cell division, growth, or reproduction of infectious organisms.